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NOTICE OF ALLOWANCE AND FEE(S) DUE

30542

7590

03/01/2010

FOLEY & LARDNER LLP
P.O. BOX 80278
SAN DIEGO, CA 92138-0278

EXAMINER

HUYN, CHUCK

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 03/01/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/705,973 | 11/13/2003 | Hemant M. Chaskar | 061602-6575 | 6783 |

TITLE OF INVENTION: SMART INTER-TECHNOLOGY HANDOVER CONTROL

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/01/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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30542 7590 03/01/2010
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SAN DIEGO, CA 92138-0278

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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10705.973 11/13/2003

Hemant M. Chaskar

061602-6575

6783

TITLE OF INVENTION: SMART INTER-TECHNOLOGY HANDOVER CONTROL

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|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 06/01/2010 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|--------------|----------|----------------|
| HUYNH, CHUCK | 2617 | 455-436000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| 10/705,973 | 11/13/2003 | Hemant M. Chaskar | 061602-6575 | 6783 |
| 30542 | 7590 | 03/01/2010 | EXAMINER | |
| HUYNIL CHUCK | | | | |
| ART UNIT | | | PAPER NUMBER | |

2617

DATE MAILED: 03/01/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 200 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 200 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/705,973

Applicant(s)

CHASKAR ET AL.

Examiner

CHUCK HUYNH

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/16/2009.
2. ☒ The allowed claim(s) is/are 60-71.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION
EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Albert on 2/12/2010.

Claims 60, 65, 70, and 71 have been amended.

Claim 60

A method, comprising:

detecting, by a mobile node, information in a beacon of a first signal received from an access node with which a the mobile node is connected;

detecting, by the mobile node, a signal strength from a second signal received from the access node with which the mobile node is connected;

upon indication by the border information in the beacon that the mobile node is in a non-border-region, and upon determination that the signal strength is below a predetermined threshold, the mobile node waiting for a predefined time;

after the predefined time has passed, detecting, by the mobile node, a signal strength from a third signal received from the access node with which the mobile node is connected; and

upon determination that the signal strength is still below a predetermined threshold, initiating, by the mobile node, handoff from a first technology network to a second technology network.

Claim 65

A mobile node apparatus, comprising:

a processor configured to detect border information in a beacon of a first signal received from an access node with which the mobile node apparatus is connected;

detect a signal strength from a second signal received from the access node with which the mobile node apparatus is connected;

upon indication by the border information in the beacon that the mobile node apparatus is in a non-border-region, and upon determination that the signal strength is below a predetermined threshold, the mobile node apparatus waits for a predefined time;

after the predefined time has passed, the mobile node apparatus detects a signal strength from a third signal received from the access node with which the mobile node apparatus is connected; and

upon determination that the signal strength is still below a predetermined threshold, the mobile node apparatus initiates ~~initiating~~ handoff from a first technology network to a second technology network.

Claim 70

A computer-readable storage medium storing a program for causing a computer to execute:

detecting, by a mobile node, border information in a beacon of a first signal received from an access node with which a the mobile node is connected;

detecting, by the mobile node, a signal strength from a second signal received from the access node with which the mobile node is connected;

upon indication by the border information indicates in the beacon that the mobile node is in a non-border-region, and upon determination that the signal strength is below a predetermined threshold, the mobile node waiting for a predefined time;

after the predefined time has passed, detecting by the mobile node a signal strength from a third signal received from the access node with which the mobile node is connected; and

upon determination that the signal strength is still below a predetermined threshold, initiating, by the mobile node, handoff from a first technology network to a second technology network.

Claim 71

~~As~~ A mobile node apparatus, comprising:

means for detecting border information in a beacon of a first signal received from an access node with which the mobile node apparatus is connected;

means for detecting a signal strength from a second signal received from the access node with which the mobile node apparatus is connected;

means for, upon indication by the border information in the beacon that the mobile node apparatus is in a non-border-region, and upon determination that the signal strength is below a predetermined threshold, the mobile node apparatus waits ~~waiting~~ for a predefined time;

means for, after the predefined time has passed, detecting a signal strength from a third signal received from the access node with which the mobile node apparatus is connected; and

means for, upon determination that the signal strength is still below a predetermined threshold, the mobile node apparatus ~~initiating~~ initiates handoff from a first technology network to a second technology network.

Response to Arguments

Applicant argues,

First, the Examiner cites McNair as disclosing "detecting border information in a beacon" at McNair, page 210, Section A. Specifically, McNair discloses that when the MT approaches

boundary cells of a network, "the MT can hear beacons from network 1 base stations as well as network 1 boundary cell base stations." While McNair discloses that the MT can hear beacons, there is no teaching or suggestion in McNair of detecting border information in a beacon, as recited in the pending claims. Further, for the same reason, McNair fails to teach or suggest "indication by the border information in the beacon that the mobile node is in a non-border region," as recited in the pending claims.

Second, the Examiner cites McNair as disclosing "detecting a signal strength from a second signal" at McNair, page 211. Applicant respectfully disagrees with the Examiner's interpretation of the disclosure of McNair as applied to the pending claims. Specifically, in accordance with embodiments of the present invention, signal strength (e.g., WLAN signal strength) is detected by the mobile node from a signal received from the same access point as the first signal. Applicant respectfully notes that the antecedent basis for "detecting a signal strength from a second signal received from the access node" is provided in "detecting border information ... first signal received from an access node..." Further reference may be made to the originally filed specification and drawing at, for example, Figures 8 and 9 and page 14, line 8 to page 16, line 2. By contrast, McNair discloses comparison of signal strength of signals from "surrounding base stations for both systems."

2. Applicant's arguments, see Section "Claim Rejection" Page 5-7, filed 11/16/2009, with respect to independent claims 60, 65, 70, and 71 have been fully considered and are persuasive.

Allowable Subject Matter

3. Claims 60-71 are allowed.
4. The following is an examiner's statement of reasons for allowance:

In light of the newly amended claims and the persuasiveness of applicant's arguments, the claims are now allowable because the closest prior art of McNair, Lobinger and Rynolds neither singularly nor in combination can fully encompass all the limitations within the claims, such as the requiring of the mobile node receiving a first, second and third signal from the same access node with each signal received performing a detection for border information from a beacon, a detection of signal strength and then waiting for a predetermined amount of time, receiving a third signal from the same access node for another detection of signal strength, as laid out in the claim language:

detecting, by a mobile node, information in a beacon of a first signal received from an access node with which a the mobile node is connected;

detecting, by the mobile node, a signal strength from a second signal received from the access node with which the mobile node is connected;

upon indication by the border information in the beacon that the mobile node is in a non-border-region, and upon determination that the signal strength is below a predetermined threshold, the mobile node waiting for a predefined time;

after the predefined time has passed, detecting, by the mobile node, a signal strength from a third signal received from the access node with which the mobile node is connected; and

in combinations with the rest of the claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUCK HUYNH whose telephone number is (571)272-7866. The examiner can normally be reached on M-F 10-1 and 2-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuck Huynh/
Examiner, Art Unit 2617

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2617